



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/090,476 | 03/04/2002 | Noriyoshi Nishiyama | MATS:037 | 5054 |

7590 04/09/2003
ROSSI & ASSOCIATES
P.O. BOX 826
Ashburn, VA 20146-0826

| | |
|--------------|--------------|
| EXAMINER | |
| PHAM, LEDA T | |
| ART UNIT | PAPER NUMBER |

2834

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|--------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/090,476 | NISHIYAMA ET AL. |
| | Examiner Leda T. Pham | Art Unit 2834 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 January 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Amendment

1. This office action is in response to Amendment filed on 01/31/03.
2. Claims 1 – 18 are presented for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1 – 4, 7 – 11, 14 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeuchi (U.S. Patent No. 5,583,387) in view of Hirano et al. (U.S. Patent No. 5,729,072).

Regarding to claim 1, 8 and 15, Takeuchi teaches a motor (figure 2) comprising a stator formed by assembling a plurality of divided stator members having teeth (11), and a rotor facing said stator (not show) wherein each one of the divided stator members is formed by laminating a plurality of core sheets and bonding at least parts of end faces (12) along a laminating direction of the core sheets with bonding by laser, and wherein the end face comprising the surface of a core sheet that when the divided stator members are assembled to form the stator, either faces the rotor or forms an outer surface of the stator member facing opposite to the rotor (figure 1). However, Takeuchi fails to teach the core sheets bonding by an adhesive.

Hirano teaches a motor (figure 1) having a stator with the core sheets bonding by an adhesive (see abstract) for ensuring the stator rigidity.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Takeuchi's stator with bonding adhesive as taught by Hirano. Doing so would ensure the stator rigidity.

Regarding to claim 2 and claim 9, Hirano teaches the motor wherein the laminated end faces (16) of each one of the divided stator members are welded to fix the core sheets with each other at parts of the teeth except the laminated end faces facing said rotor (figure 1).

Regarding to claim 3 and claim 10, Takeuchi teaches the motor wherein laminated end faces of each one of the divided stator members (11) are welded to fix the core sheets with each other at back faces of the teeth (17, figure 2).

Regarding to claim 4 and claim 11, Takeuchi teaches the motor further comprising a welding section (17) for linking the divided stator members adjacent to each other by welding (figure 2).

Regarding to claim 7 and claim 14, Takeuchi teaches the motor wherein the teeth are wound with conductive windings (16) in a concentrated manner via insulators (15, figure 1).

Regarding to claim 16 - 17, Takeuchi teaches the claim invention except for the inner rim is bonded. However, Hirano teaches in his invention that welding may be replaced by adhesive bonding (see abstract). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to bond the inner rim of the stator as taught by Hirano, since Hirano states in the abstract that such modification would construct an integral structure stator with rigidity.

Regarding to claim 18, Takeuchi teaches the stator members are welded together to form the stator (figure 2).

5. Claims 5 - 6, 12 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Takeuchi and Hirano as applied to claim 1 and claim 8 above, and further in view of Torossian et al. (U.S. Patent No. 4,103,195).

Regarding to claim 5 and claim 12, the combination of Takeuchi and Hirano teaches the claimed invention except for the added limitations a non-bonding section providing near said welding section to block the adhesive from infiltrating around said welding section.

Torossian teaches the laminating stator core having a non-bonding section providing near said welding section to provide uniform separation and insulation between the individual segment (see abstract).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the non-bonding section in the stator core as taught by Torossian for the purpose of provide uniform separation and insulation between the individual segment.

Regarding to claim 6 and claim 13, Torossian discloses the claimed invention except for the non-bonding section coating with water and oil repellent material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select water and oil repellent material to be the non-bonding section in the stator core, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability of the intended use as a matter of obvious design choice. *In re Leshin, 125 USPQ 416.*

Response to Arguments

6. Applicant's arguments with respect to claims 1- 14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leda T. Pham whose telephone number is (703) 305-4864. The examiner can normally be reached on M-F (7:30-5:00) first Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-9176 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

Application/Control Number: 10/090,476
Art Unit: 2834

Page 6

Leda T. Pham
Examiner
Art Unit 2834

LTP
March 29, 2003



NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800